

Amendments to the claims

1. (Currently Amended) A method of producing polypropylene tape fibers comprising the sequential steps of

(a) extruding a heated formulation of polypropylene comprising at most about 2000 ppm, preferably at most about 1500 ppm, more preferably at most about 1000 ppm, and most preferably below about 800 ppm, of a nucleator compound into a film or tube;

(b) immediately quenching the film or tube of step "a" to a temperature which prevents orientation of polypropylene crystals therein;

(c) slitting said film or tube with cutting means oriented longitudinally to said film or tube thereby to produce individual tape fibers therefrom; and

(d) mechanically drawing said individual tape fibers at a draw ratio of at least 5:1 while exposing said fibers to a temperature of at between about 250 and about ~~360°C~~ 360°F; and

(e) heat setting said tape fibers at a temperature in excess of the drawing temperature.

2. (Original) The method of claim 1 wherein the amount of nucleator compound present in step "a" is at most about 1500 ppm.

3. (Original) The method of claim 2 wherein the amount of nucleator compound present in step "a" is at most about 1000 ppm.

4. (Original) The method of claim 3 wherein the amount of nucleator

compound present in step "a" is at most about 800 ppm.

5. (Canceled).

6. (Canceled)

7. (Currently Amended) The method of ~~claim 6~~ claim 1 wherein the drawing temperature is between ~~270 and 300°C~~ 270 and 300°F.

8. (Canceled)

9. (Canceled)

10. (Currently Amended) ~~The method of Claim 9~~ A method of producing polypropylene tape fibers comprising the sequential steps of

(a) extruding a heated formulation of polypropylene comprising at most about 2000 ppm, preferably at most about 1500 ppm, more preferably at most about 1000 ppm, and most preferably below about 800 ppm, of a nucleator compound into a film or tube;

(b) immediately quenching the film or tube of step "a" to a temperature which prevents orientation of polypropylene crystals therein;

(c) slitting said film or tube with cutting means oriented longitudinally to said film or tube thereby to produce individual tape fibers therefrom;

(d) mechanically drawing said individual tape fibers at a draw ratio of at least 5:1 while exposing said fibers to a temperature of at between about 250 and about 360°F; and

(e) heat setting said tape fibers at a temperature in excess of the drawing temperature, wherein the heat setting temperature is between about 300 and about 400°F.

11. (Previously Presented) The method of claim 1 wherein the quenching temperature in step "b" is at least about 5°C and less than 40°C.

12. (Previously Presented) The method of claim 1 wherein said polypropylene tape fibers are comprised of at least one nucleator compound selected from:

(a) dibenzylidene sorbitol based compounds including for example: dibenzylidene sorbitol (DBS), monomethyldibenzylidene sorbitol, such as 1,3:2,4-bis(p-methylbenzylidene) sorbitol (p-MDBS), dimethyl dibenzylidene sorbitol, 1,3:2,4-bis(3,4-dimethylbenzylidene) sorbitol (3,4-DMDBS); or

(b) sodium phosphate salts such as sodium 2,2'-methylene-bis-(4,4-di-tert-butylphenyl) phosphate, or

(c) lithium phosphate salts.

13. (Canceled)

14. (Currently Amended) A method of producing polypropylene tape fibers comprising the sequential steps of

(a) extruding a heated formulation of polypropylene comprising at most about 2000 ppm, preferably at most about 1500 ppm, more preferably at most about 1000 ppm, and most preferably below about 800 ppm, of a nucleator compound into a film or tube;

- (b) immediately quenching the individual tape fibers of step "a" to a temperature which prevents orientation of polypropylene crystals therein;
- (c) mechanically drawing said individual tape fibers at a draw ratio of at least 5:1 while exposing said fibers to a temperature of at between 250 and 360°F thereby permitting crystal orientation of the polypropylene therein; and
- (d) heat setting said tape fibers at a temperature in excess of the drawing temperature.

- 15. (Previously Presented) The method of claim 14 wherein the amount of nucleator compound present in step "a" is at most about 1500 ppm.
- 16. (Previously Presented) The method of claim 15 wherein the amount of nucleator compound present in step "a" is at most about 1000 ppm.
- 17. (Previously Presented) The method of claim 16 wherein the amount of nucleator compound present in step "a" is at most about 800 ppm.
- 18. (Previously Presented) The method of claim 14 further comprising the step of heat setting said tape fibers.
- 19. (Previously Presented) The method of claim 14 wherein the quenching temperature in step "b" is at least about 5°C and less than 40°C.
- 20. (Previously Presented) The method of claim 14 wherein the drawing temperature of step "c" is between 270 and 360°F.

21. (Previously Presented) The method of Claim 21 wherein the drawing temperature of step "c" is between 300 and 360°F.

22. (Previously Presented) The method of Claim 14 wherein said polypropylene tape fibers are comprised of at least one nucleator compound selected from:

(a) dibenzylidene sorbitol based compounds including for example: dibenzylidene sorbitol (DBS), monomethyldibenzylidene sorbitol, such as 1,3:2,4-bis(p-methylbenzylidene) sorbitol (p-MDBS), dimethyl dibenzylidene sorbitol, 1,3:2,4-bis(3,4-dimethylbenzylidene) sorbitol (3,4-DMDBS); or

(b) sodium phosphate salts such as sodium 2,2'-methylene-bis-(4,4-di-tert-butylphenyl) phosphate, or

(c) lithium phosphate salts.

23. (Canceled)